UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

SDMS Document ID
2003599

ACCESS AGREEMENT

PROPERTY ADDRESS:

Mailing Address (If Different than Property Address):
4957 Fillmore St

I will allow Environmental Protection Agency (EPA) staff and EPA's authorized representatives to have access to my property identified above for the purpose of collecting soil samples. I understand that this service is provided at no cost to me.

I understand that this soil testing is part of an investigation of possible metals contamination in soils in the north Denver area. EPA is conducting this investigation as part of its responsibilities under the Comprehensive Environmental Response, Compensation and Liability Act, a law also referred to as "Superfund".

Doris Garcia
Print Name

7/29/99
Date

Doris Garcia
Signature

303-296-6019
Phone Number

Please check the following if applicable:
___ I would like EPA to provide me with a portion of the sample, called a "split sample," that I may have analyzed at my own expense.

If you have any questions, please contact Ted Fellman at (303) 312-6119, or Marta Valentine from the Morrison Knudsen Corporation (EPA's contractor) at (303) 948-4693.

Your Comments:

PLEASE SIGN AND RETURN THIS ACCESS AGREEMENT TO OUR CONTRACTOR IN THE ENCLOSED PREPAID ENVELOPE. Soil sampling will take about 1 hour. The owner or resident need not be present. If you would like to be notified when we plan to sample your property, please state so in the Comments section and provide your phone number. Also, pet owners are asked to provide a phone number so that if necessary we may schedule the sampling at a time when the pet will be indoors or restrained. Thank you for participating in this important study of your neighborhood.

NOTE: If you are <u>not</u> the current property owner, and you are not a renter who wishes to forward this request to the owner, please state so in the Comments section and return this agreement unsigned.

08/05/99 alw

E-746

A Few Points You Could Make

- October is Children's Health Month.

- EPA is sponsoring a National campaign on Second Hand Smoke. This campaign is especially important to children in Libby, Montana with potential environmental risks also being posed by asbestos exposure.

- Many studies have shown that the combination of smoking and asbestos exposure is particularly hazardous. Cigarette smokers are 10 times more likely to develop lung cancer than non-smokers. Smokers who are heavily exposed to asbestos are as much as 90 times more likely to develop lung cancer than are non-exposed individuals who do not smoke.

- Children who are exposed to second-hand smoke are exposed to the same toxins as those who inhale cigarette smoke directly. Exposure to second hand smoke has been proven to cause lung cancer and other illnesses.

- It makes sense that if they are exposed to asbestos, and second hand smoke, their risk of developing lung cancer greatly increases.

- Second-hand smoke is all around.
- Nationwide, 53,000 die annually from second-hand smoke.*
- Nationwide, 430,000 die annually from tobacco related causes.*

- 1400 Montanans die annually from tobacco related causes.*
- 21% of all Montanans smoke.*
- 38% of Montana High School students smoke.*
- 23% of Montana 7th and 8th graders smoke.*
- 3000 Montana youth under 18 become new smokers annually.*

- EPA is working to remove potential asbestos exposures in Libby. Smokers, be it parents or anyone who smokes around kids are the ones who can help to remove second-hand smoke from the air children breathe.

- Smoking outside can significantly decrease the chance of others contracting lung disease. **Until you can stop, please go outside for the kids' sake.**

- You can learn more about EPA's efforts to protect children's health at www.epa.gov/children

* Statistics from the Centers for Disease Control and Prevention (1997 - 1998)

TARGET SHEET

EPA REGION VIII

SUPERFUND DOCUMENT MANAGEMENT SYSTEM

DOCUMENT NUMBER: 1000110

SITE NAME: LIBBY ASBESTOS

DOCUMENT DATE: 10/12/2001

DOCUMENT NOT SCANNED

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(303) 312-6473

EPA

has found that children who breathe secondhand smoke are more likely to suffer from:

- Bronchitis and pneumonia
- Wheezing and coughing spells
- More ear infections
- More frequent and severe asthma attacks

According

to the National Cancer Institute, there are links between secondhand smoke and:

- Sudden Infant Death Syndrome (SIDS)
- New cases of childhood asthma
- Behavioral and cognitive problems in children

Breathing secondhand smoke can be harmful to your children's health. You can protect your children by making your home smoke-free. Take the Smoke-Free Home Pledge and protect your children from the health risks of secondhand smoke.

How

to keep a smoke-free home:

- Choose not to smoke in your home and do not permit others to do so.
- Choose not to smoke if children are present, especially infants and toddlers. They are especially vulnerable to the effects of second-hand smoke.
- Do not allow baby-sitters or others who work in your home to smoke in the house or near young children.
- If you must smoke, choose to smoke outside. Moving to another room or opening a window is not enough to protect your children.

Join the millions of Americans who are protecting their children from second- hand smoke. Take the Smoke-Free Home Pledge today.

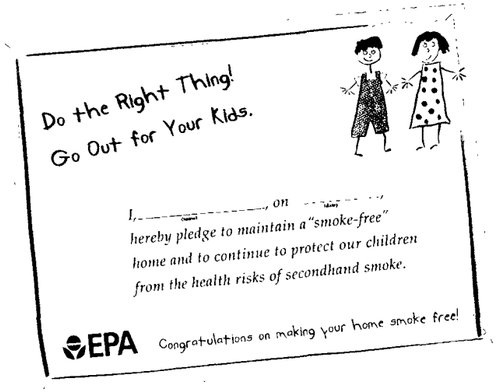
Pledge

to make your home smoke-free

Call our toll-free Smoke-Free Home Pledge Hotline 1-800-513-1157.

A Smoke-Free Home Kit will be mailed out to you which includes:

- *Tips on Keeping your Home Smoke-Free*
- *Smoke-Free Home Magnet*
- *Smoke-Free Home Certificate*



Help

spread the word in your community:

- Make sure your children are not exposed to tobacco smoke at their school, pre-school, daycare, or in cars or buses.
- Help other parents and caregivers understand the health risks to children from secondhand smoke.
- Encourage friends and other parents to Take the Pledge and make their home a "Smoke-Free Home."
- Educate others through local hospitals, doctors, or community groups about health risks from secondhand smoke.

EPA
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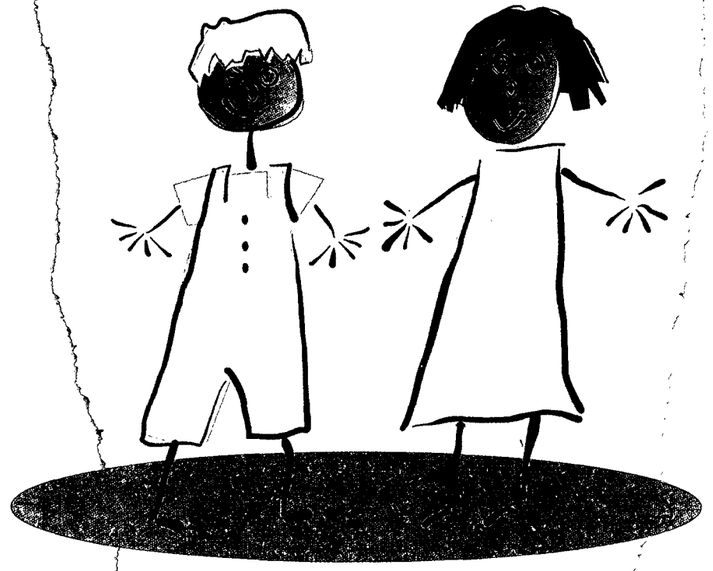
For More Information Visit EPA's Website:
www.epa.gov/iaq/ets

EPA United States Environmental Protection Agency
Indoor Environments Division (6609J) Office of Air & Radiation
EPA-402-K-00-004 April 2000

TAKE THE SMOKE-FREE *home* PLEDGE



Go out for your Kids

LIBBY COMMUNITY INTERAGENCIES, INC. (LCI)

PRESENTS:

ASBESTOS EXPOSURE AND QUITTING TOBACCO USE:

IMPORTANT INFORMATIN, STATISTICS AND RESOURCES TO HELP YOU QUIT AND STAY QUIT!!

THE RISK OF SMOKING AND ASBESTOS EXPOSURE

Many studies have shown that the combination of smoking and asbestos exposure is particularly hazardous. Cigarette smokers, on the average, are 10 times more likely to develop lung cancer as are non-smokers. For non-smokers with asbestos, the risk is about 5 times greater than for those in the general population. By contrast, smokers who are heavily exposed to asbestos are as much as 90 times more likely to develop lung cancer than are non-exposed individuals who do not smoke. Smoking does not appear to increase the risk of mesothelioma, however.

There is evidence that quitting smoking will reduce the risk of lung cancer among asbestos exposed workers, perhaps by as much as half or more after at least five years without smoking, People who were exposed to asbestos on the job at any time during their life or who suspect they may have been exposed ***should not smoke. If they smoke, they should stop !***

RISK FACTORS FOR LUNG CANCER:

TOBACCO SMOKING: By far the most important factor is tobacco smoking. At the beginning of the 20th century, lung cancer was rare. The introduction of manufactured cigarettes, which made them readily available, changed this. More than 80% of lung cancers are thought to result from smoking. The longer a person has been smoking and the more packs per day smoked, the greater the risk. If the person stops smoking before cancer develops, the damaged lung tissue starts to gradually return to normal. Even after ten years, the ex-smokers risk does not equal the lower risk of the person who never smoked. However, an ex-smoker's risk is about half the risk of people who continue to smoke. Cigar smoking and pipe smoking are almost as likely to cause lung cancer as cigarette smoking. There is no evidence that smoking low tar cigarettes reduces the risk of lung cancer.

Non-smokers who breathe in the smoke of others (also called second-hand smoke or environmental tobacco smoke) are also at increased risk for lung cancer. A non-smoker who is married to a smoker has a 30% greater risk of developing lung cancer than the spouse of a non-smoker. Workers who have been exposed to tobacco smoke in the workplace are more likely to get lung cancer.

ASBESTOS: Death from lung cancer is about seven times more likely to occur among asbestos workers than the general population. Exposure to asbestos fibers is an important risk for lung cancer. Asbestos workers who smoke have a very high lung cancer risk which is 50-90 times greater than that of people in general. Both smokers and non-smokers exposed to asbestos also have a greater risk of developing a type of cancer which starts from the pleura (the layer of cells that line the outer surface of the lung). This cancer is called mesothelioma.

RISK FACTORS FOR MESOTHELIOMA

Asbestos: The main risk factor for developing mesothelioma is exposure to asbestos. The risk of developing mesothelioma is related to how much asbestos a person was exposed to and how long this exposure lasted. People exposed at an early age, for a long period of time, and at higher levels are most likely to develop this cancer. Mesotheliomas take a long time to develop. The time between exposure to asbestos and diagnosis of mesothelioma is usually 2- and 40 years.

Tobacco: Although tobacco smoking has not been associated wit the development of mesotheliomas, the combination of smoking and asbestos exposure greatly increases the risk of lung cancer. Asbestos workers who also smoke have a lung cancer risk of 50-90 times greater than that of the general population. More asbestos workers die of lung cancer than of mesothelioma.

Information compiled from the American Cancer Society's information about Asbestos, Lung Cancer and Malignant Mesothelioma

TOBACCO RELATED DEATHS ARE THE #1 CAUSE OF PREVENTABLE DEATHS IN AMERICA

NATIONWIDE, 430,000 DIE ANNUALLY FROM TOBACCO RELATED CAUSES

NATIONWIDE, 53,000 DIE ANNUALLY FROM SECOND-HAND SMOKE

1400 MONTANANS DIE ANNUALLY FROM TOBACCO RELATED CAUSES

21% OF ALL MONTANANS SMOKE

38% OF MONTANA HIGH SCHOOL STUDENTS SMOKE

23% OF MONTANA 7^{TH} AND 8^{TH} GRADERS SMOKE

12% OF MONTANA MALES USE SPIT TOBACCO (DOUBLE THE RATE OF OTHER WESTERN STATES)

33% OF MONTANA HIGH SCHOOL MALES USE SPIT TOBACCO

3000 MONTANA YOUTH UNDER 18 BECOME NEW SMOKERS ANNUALLY

STATISTCS COMPILED FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION (1997-1998)

RESOURCES AVAILABLE TO HELP QUIT TOBACCO USE

TOLL FREE MONTANA QUIT LINE: 1-877-612-1585
Hours of operation: Mondays-Thursdays: 9am-8pm
Fridays: 9am-5pm
Saturdays: 9am-1pm

NICOTENE ANONYMOUS (To help you stay quit): 293-5711

LIBBY COMMUNITY INTERAGENCIES: 293-3951
LCI has more information available about the harmful effects of tobacco use and how to help you quit tobacco use.

REMEMBER, THE FIRST STEP BEGINS WITH YOU COMMITTMENT TO QUIT TOBACCO USE !!

What Is Secondhand Smoke?

Secondhand smoke is a mixture of the smoke given off by the burning end of a cigarette, pipe, or cigar, and the smoke exhaled from the lungs of smokers. This mixture contains more than 4,000 substances, more than 40 of which are known to cause cancer in humans or animals and many of which are strong irritants.

- Secondhand smoke is also called environmental tobacco smoke (ETS); exposure to secondhand smoke is called involuntary smoking, or passive smoking.
- Secondhand smoke can cause lung cancer in nonsmokers.
- Secondhand smoke has been classified by the U.S. Environmental Protection Agency (EPA) as a known cause of lung cancer in humans (Group A carcinogen).
- Passive smoking is estimated by EPA to cause approximately 3,000 lung cancer deaths in nonsmokers each year.
- Secondhand smoke is a serious health risk to children.

The developing lungs of young children are also affected by exposure to secondhand smoke. Infants and young children whose parents smoke are among the most seriously affected by exposure to secondhand smoke, being at increased risk of lower respiratory tract infections such as pneumonia and bronchitis.

- EPA estimates that passive smoking is responsible for between 150,000 and 300,000 lower respiratory tract infections in infants and children under 18 months of age annually, resulting in between 7,500 and 15,000 hospitalizations each year.
- Children exposed to secondhand smoke are also more likely to have reduced lung function and symptoms of respiratory irritation like cough, excess phlegm, and wheeze.
- Passive smoking can lead to buildup of fluid in the middle ear, the most common cause of hospitalization of children for an operation.
- Asthmatic children are especially at risk. EPA estimates that exposure to secondhand smoke increases the number of episodes and severity of symptoms in hundreds of thousands of asthmatic children.
- EPA estimates that between 200,000 and 1,000,000 asthmatic children have their condition made worse by exposure to secondhand smoke.
- Passive smoking may also cause thousands of non-asthmatic children to develop the condition each year.

Other health implications.

- Exposure to secondhand smoke causes irritation of the eye, nose, and throat.
- Passive smoking can also irritate the lungs, leading to coughing, excess phlegm, chest discomfort, and reduced lung function.
- Secondhand smoke may affect the cardiovascular system, and some studies have linked exposure to secondhand smoke with the onset of chest pain.

How To Avoid Secondhand Smoke.

In the Home:

- Post a polite sign on your front door - visitors appreciate knowing in advance that your home is a smokefree zone.
- If visitors miss the sign and begin to light up - be ready to politely request they smoke outside - if you ask gently, they'll probably be very understanding.
- Remove all ashtrays.
- Let babysitters or other caregivers know in advance that you do not want any smoke around your children.
- Teach your children how to discreetly remove themselves from secondhand smoke they encounter in others' homes (playing outside where possible, or moving to another room).
- If you live with a smoker - chances are they feel badly enough about their habit and wish they could quit. Be gentle, but firm in your request that they smoke only outside.
- Support smokers who decide they're going to quit.

If all else fails and you live with a smoker who insists on smoking in the home - establish a smoking zone - a separate room with good cross ventilation, and make sure the windows are open while they smoke. *Note: this will not completely eliminate your exposure to the harmful chemicals in secondhand smoke, but it's better than close exposure.*

In Public Places:

- Ask in advance about smoking policies and let all hotels, tours, ships, rental car agencies, etc. know your preferences.
- Always take the smokefree options that are available. If one place isn't smokefree - choose another that is and let both places know the reason for your choice.
- Eat in smokefree restaurants, and let those that are not smokefree know the reason you won't patronize them.

Further Steps for Nonsmokers:

- You can (and should) be polite to smokers, without giving up your quest to breath smokefree.
- In the rare instance where you encounter hostility - do not respond with hostility. Instead, work to change the policy of the place you're in, and get help from those in charge of compliance with the policy.
- Write to public officials, newspapers, and business to promote clean air policies.
- Attend public meetings and express your views.
- Know the law, and Support organizations in your area that are working to protect nonsmokers. These include local or state offices.

MONTANA TOBACCO USE PREVENTION PROGRAM

Protecting Your Health!

What you can do to reduce the health risks of passive smoking.

In The Home:

- Don't smoke in your house or permit others to do so.
- If a family member insists on smoking indoors, increase ventilation in the area where smoking takes place.
- Open windows or use exhaust fans.
- Do not smoke if children are present, particularly infants and toddlers. They are particularly susceptible to the effects of passive smoking.
- Don't allow baby-sitters or others who work in your home to smoke in the house or near your children.

Where Children Spend Time:

- EPA recommends that every organization dealing with children have a smoking policy that effectively protects children from exposure to environmental tobacco smoke.
- Find out about the smoking policies of the day care providers, pre-schools, schools, and other care-givers for your children.
- Help other parents understand the serious health risks to children from secondhand smoke.
- Work with parent/teacher associations, your school board and school administrators, community leaders, and other concerned citizens to make your child's environment smoke free.

In The Workplace:

- EPA recommends that every company have a smoking policy that effectively protects nonsmokers from involuntary exposure to tobacco smoke. Many businesses and organizations already have smoking policies in place but these policies vary in their effectiveness.
- If your company does not have a smoking policy that effectively controls secondhand smoke, work with appropriate management and labor organizations to establish one.
- Simply separating smokers and nonsmokers within the same area, such as a cafeteria, may reduce exposure, but nonsmokers will still be exposed to re-circulated smoke or smoke drifting into nonsmoking areas.
- Prohibiting smoking indoors or limiting smoking to rooms that have been specially designed to prevent smoke from escaping to other area of the building are two options that will effectively protect nonsmokers.
- The costs associated with establishing properly designated smoking rooms vary from building to building, and are likely to be greater than simply eliminating smoking entirely.
- If smoking is permitted indoors, it should be in a room that meets several conditions:
- Air from the smoking room should be directly exhausted to the outside by an exhaust fan.
- Air from the smoking room should not be re-circulated to other parts of the building.

- More air should be exhausted from the room than is supplied to it to make sure ETS doesn't drift to surrounding spaces.
- The ventilation system should provide the smoking room with 60 cubic feet per minute (CFM) of supply air per smoker. This air is often supplied by air transferred from other parts of the building, such as corridors.
- Nonsmokers should not have to use the smoking room for any purpose. It should be located in a non-work area where no one, as part of his or her work responsibilities, is required to enter.
- Employer-supported smoking cessation programs are an important part of any smoking policy.
- Approximately 25 percent of American adults still smoke.
- Many smokers would like to quit, but cigarette smoking is physically and psychologically addictive, and quitting is not easy.
- While working in a smoke-free building may encourage some smokers to quit, a goal of any smoking policy should be to actively support smokers who want to kick the habit.

If there are designated outdoor smoking areas, smoking should not be permitted right outside the doors (or near building ventilation system air intakes) where nonsmokers may have to pass through smoke from smokers congregated near doorways. Some employers have set up outdoor areas equipped with shelters and ashtrays to accommodate smokers.

In Restaurants and Bars:

Know the law concerning smoking in your community. Some communities have banned smoking in places such as restaurants entirely. Others require separate smoking areas in restaurants, although most rely on simply separating smokers and nonsmokers within the same space, which may reduce but not eliminate involuntary exposure to ETS. If smoking is permitted, placement of smoking areas should be determined with some knowledge of the ventilation characteristics of the space to minimize nonsmoker exposure. For example, nonsmoking areas should be near air supply ducts while smoking areas should be near return registers or exhausts.

- Ask to be seated in nonsmoking areas as far from smokers as possible.
- If your community does not have a smoking control ordinance, urge that one be enacted. If your local ordinances are not sufficiently protective, urge your local government officials to take action.
- Few restrictions have been imposed in bars where drinking and smoking seem to go together. In the absence of state or local laws restricting smoking in bars, encourage the proprietor to consider his or her nonsmoking clientele, and frequent places that do so.

In Other Indoor Spaces:

Does your state or community have laws addressing smoking in public spaces? Many states have laws prohibiting smoking in public facilities such as schools, hospitals, airports, bus terminals, and other public buildings.

- Know the law. Take advantage of laws designed to protect you. Federal laws now prohibit smoking on all airline flights of six hours or less within the U.S. and on all interstate bus travel.

Secondhand Smoke & Asthma : AN UNHEALTHY MIX

Asthma is a serious disease

Asthma is a serious lung disease that makes it hard to breathe.
Asthma symptoms include wheezing, a sense of tightness, pressure or pain in the chest, coughing, and shortness of breath

Asthma can be fatal
It causes about 5,000 deaths nationwide every year[1]

What is Secondhand Smoke?
- Secondhand Smoke is the mixture of smoke given off by cigarettes, cigars, and pipes, and the smoke exhaled by smokers
- Exposure to Secondhand Smoke causes cancer and other serious health risks

Children are especially susceptible to Secondhand Smoke.
The lungs of children are still developing and they breathe more per pound of body weight than adults do

The Facts about Secondhand Smoke & Asthma:

- Nearly 1 in 13 school-aged children has Asthma[2]
- An estimated 8,000 - 26,000 new asthma cases arise in children per year[3]
- Between 1980-1995, asthma among children under 5 years old increased by 160%[4]
- Nearly 1 in 5 of all pediatric emergency room visits in the U.S. are asthma-related[5]
- Nearly 2 out of 5 children aged 2 months-5 years live with at least one smoker[6]
- An estimated 9-12 million children are exposed to secondhand smoke at home[7]
- It is estimated that up to 1 million children have aggravated asthma symptoms due to Secondhand Smoke[8]
- Other major indoor asthma triggers are dust mites, mold, animal dander, and cockroach allergens

Secondhand Smoke Exposure is Associated with:

- An estimated 150,000-300,000 lower respiratory tract infections (pneumonia and bronchitis) annually in toddlers (children under 18 months) with up to 15,000 of such cases requiring hospitalization[9]
- An estimated 700,000-1.6 million physician office visits per year for children under 3 years of age for middle ear infections[10]
- An estimated 1,900-2,700 deaths per year from sudden infant death syndrome (SIDS)[11]

What does Asthma and Its Related Illnesses Cost Americans?

- An estimated $11.3 billion in total costs[12]
- An estimated $200 million of that total cost is used to treat children under 18 years of age whose asthma is triggered by Secondhand Smoke[13]
- Leading cause of almost 10 million school days missed per year[14]

What can you do as a citizen?

- If you smoke, the best action you can take for yourself and your children is to stop smoking now
- If you are not ready to quit, choose not to smoke inside your car or home, especially if children are around. Make a pledge to protect your family from Second Smoke and "Smoke Outside".
- If you suspect your child has asthma or any possible related respiratory illnesses - Get your child an asthma screening
- To find out where the next asthma screening will be in your area, call 1-800-LUNG-USA (1-800-5864-872)

Where can you get more information about Secondhand Smoke and Asthma?

- EPA Indoor Air Quality information Clearinghouse at 1-800-438-4318

OTHER IMPORTANT INTERNET LINKS

US Environmental Protection Agency
http://www.epa.gov/iaq/ 1-800-438-4318

American Lung Association
http://www.lungusa.org 1-800-LUNG-USA

National Asthma Education & Prevention Program (301) 592-8573
http://www.nhlbi.nih.gov/about/naepp/index.htm

Allergy and Asthma Network Mothers of Asthmatics, Inc.
http://www.aanma.org 1-800-878-4403

American Academy of Allergy Asthma and Immunology
http://www.aaaai.org 1-800-822-2762
(Call for an asthma specialist in your area)

Asthma & Allergy Foundation of America
http://www.aafa.org 1-800-7-ASTHMA

This fact sheet was produced under a cooperative agreement between the U.S. Environmental Protection Agency, Indoor Environment Division and the Association of State and Territorial Health Officials (ASTHO).

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Tel 202-371-9090
Fax 202-371-9797
http://www.astho.org

Sources for Statistics in Factsheet on Secondhand Smoke & Asthma

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[3] U.S. Environmental Protection Agency. 1992. Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders. p.8-14. EPA/600/6-90/006F.

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[9] U.S. Environmental Protection Agency. 1992. Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders. p.8-14. EPA/600/6-90/006F.

[10] California Environmental Protection Agency. 1997. Health Effects of Exposure to Environmental Tobacco smoke. p.6-28.

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Environmental Tobacco Smoke and Lung Cancer

The Environmental Protection Agency firmly maintains that the bulk of the scientific evidence demonstrates that secondhand smoke–environmental tobacco smoke, or "ETS" – causes lung cancer and other significant health threats to children and adults. EPA's report was peer-reviewed by 18 eminent, independent scientists who unanimously endorsed the study's methodology and conclusions. Since EPA's 1993 report which estimated the risks posed by ETS, numerous independent health studies have presented an impressive accumulating body of evidence that confirms and strengthens the EPA findings. It is widely accepted in the scientific and public health communities that secondhand smoke poses significant health risks to children and adults.

A U.S. District Court decision has vacated several chapters of an EPA scientific risk assessment document that served as the basis for EPA's classification of secondhand smoke as a Group A carcinogen and estimates that ETS causes 3,000 lung cancer deaths in non-smokers each year. The ruling was largely based on procedural grounds. EPA is appealing this decision. None of the findings concerning the serious respiratory health effects of secondhand smoke in children were challenged.

United States Environmental Protection Agency
Washington, DC 20460
Office of Communications, Education, and Public Affairs

Statement
by
EPA Administrator, Carol M. Browner
July 20, 1998

The recent court decision regarding EPA's study on second-hand tobacco smoke should in no way discourage Americans from protecting themselves and their children from exposure to second-hand smoke. It is widely accepted in the scientific community that second-hand smoke poses significant health risks to children and adults. We believe the court decision challenging EPA's study should in no way change those conclusions. The court's decision is based on procedural concerns regarding technical aspects of EPA's study. It is important to note that the court's decision does not challenge the scientific findings on the effects of second-hand smoke on children's health. Further, since EPA's 1993 study, health study after health study confirms that both children and adults are at serious risk from exposure to second-hand smoke. EPA and the Department of Justice are evaluating what actions should be taken to aggressively challenge this ruling, including an appeal.

Created: July 27, 1998
http://www.epa.gov/iaq/etsstudy.html

United States
Environmental Protection
Agency

EPA 402-F-94-005
June 1994

Setting the Record Straight: Secondhand Smoke is A Preventable Health Risk

Introduction

In early 1993, EPA released a report (*Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*; EPA/600/6-90/006 F) that evaluated the respiratory health effects from breathing secondhand smoke (also called environmental tobacco smoke). In that report, EPA concluded that secondhand smoke causes lung cancer in adult nonsmokers and impairs the respiratory health of children. These findings are very similar to ones made previously by the National Academy of Sciences and the U.S. Surgeon General.

The EPA report classified secondhand smoke as a Group A carcinogen, a designation which means that there is sufficient evidence that the substance causes cancer in humans. The Group A designation has been used by EPA for only 15 other pollutants, including asbestos, radon, and benzene. Only secondhand smoke has actually been shown in studies to cause cancer at typical environmental levels. EPA estimates that approximately 3,000 American nonsmokers die each year from lung cancer caused by secondhand smoke.

Every year, an estimated 150,000 to 300,000 children under 18 months of age get pneumonia or bronchitis from breathing secondhand tobacco smoke. Secondhand smoke is a risk factor for the development of asthma in children and worsens the condition of up to one million asthmatic children.

EPA has clear authority to inform the public about indoor air pollution health risks and what can be done to reduce those risks. EPA has a particular responsibility to do everything possible to warn of risks to the health of children.

A recent high profile advertising and public relations campaign by the tobacco industry may confuse the American public about the risks of secondhand smoke. EPA believes it's time to set the record straight about an indisputable fact: secondhand smoke is a real and preventable health risk.

EPA absolutely stands by its scientific and well documented report. The report was the subject of an extensive open review both by the public and by EPA's Science Advisory Board (SAB), a panel of independent scientific experts. Virtually every one of the arguments about lung cancer advanced by the tobacco industry and its consultants was addressed by the SAB. The panel concurred in the methodology and unanimously endorsed the conclusions of the final report.

The report has also been endorsed by the U.S. Department of Health and Human Services, the National Cancer Institute, the Surgeon General, and many major health organizations.

Classification of Secondhand Smoke as a Known Human (Group A) Carcinogen

The finding that secondhand smoke causes lung cancer in nonsmoking adults is based on the total weight of the available evidence and is not dependent on any single analysis. This evidence includes several important facts.

First, it is indisputable that smoking tobacco causes lung cancer in humans, and there is no evidence that there is a threshold below which smoking will not cause cancer.

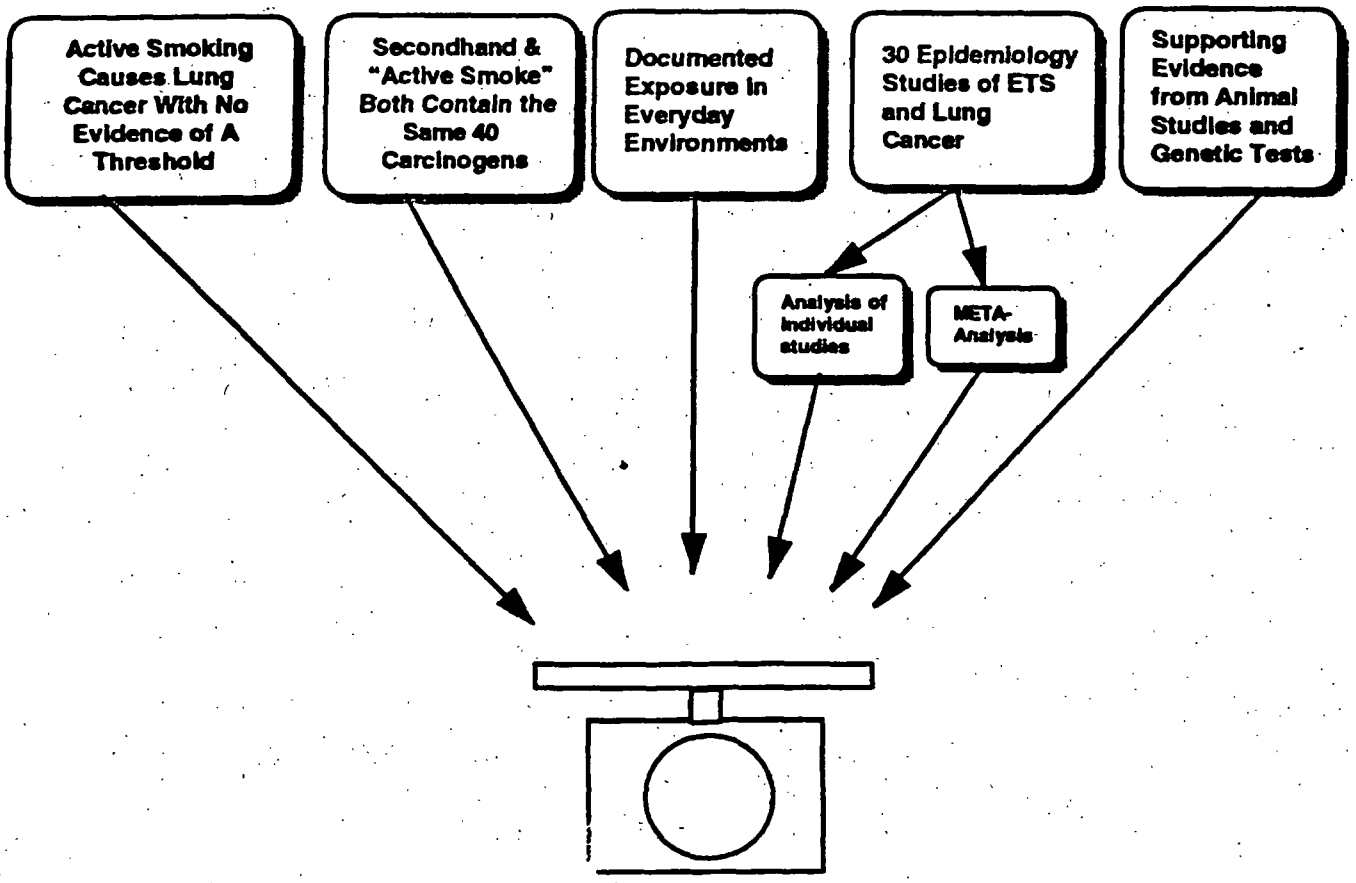
Second, although secondhand smoke is a dilute mixture of "mainstream" smoke exhaled by smokers and "sidestream" smoke from the burning end of a cigarette or other tobacco product, it is chemically similar to the smoke inhaled by smokers, and contains a number of carcinogenic compounds.

Third, there is considerable evidence that large numbers of people who do not smoke are exposed to, absorb, and metabolize significant amounts of secondhand smoke.

Fourth, there is supporting evidence from laboratory studies of the ability of secondhand smoke both to cause cancer in animals and to damage DNA, which is recognized by scientists as being an instrumental mechanism in cancer development.

Finally, EPA conducted multiple analyses on the then-available 30 epidemiology studies from eight different countries which examined the association between secondhand smoke and lung cancer in women who never smoked themselves but were exposed to their husband's smoke. Since the epidemiology studies are the major thrust of the tobacco industry arguments against the EPA report, these studies are examined in more detail below.

WEIGHT OF EVIDENCE FOR CLASSIFYING SECONDHAND SMOKE AS A KNOWN HUMAN (GROUP A) LUNG CARCINOGEN



The Epidemiology Studies

The most important aspect of the review of the epidemiology studies is the remarkable consistency of results across studies that support a causal association between secondhand smoke and lung cancer.

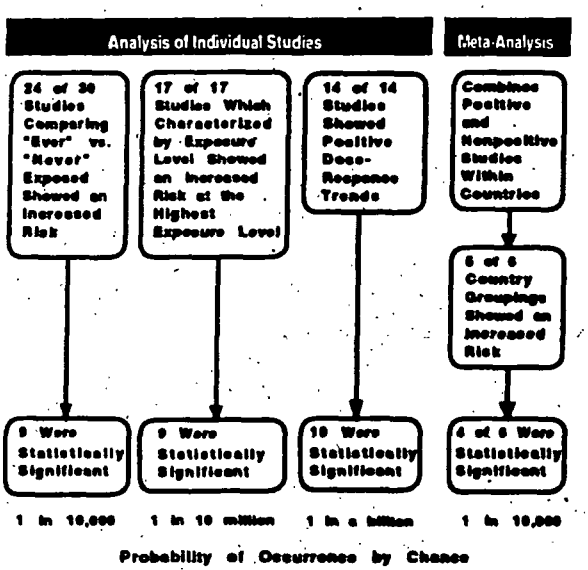
In assessing the studies several different ways, it becomes clear that the extent of the consistency defies attribution to chance. When looking only at the simple measure of exposure of whether the husband ever smoked, 24 of 30 studies reported an increase in risk for nonsmoking women with smoking husbands. Since many of these studies were small, the chance of declaring these increases statistically significant was small. Still, nine of these were statistically significant, and the probability that this many of the studies would be statistically significant merely by chance is less than *1 in 10 thousand.*

The simple overall comparison of risks in ever vs. never exposed to spousal smoking tends to hide true increases in risk in two ways. First, it categorizes many women as never exposed who actually received exposure from sources other than spousal smoking. It also includes some women as exposed who actually received little exposure from their husband's smoking. One way to correct for this latter case is to look at the women whose husbands smoked the most. When one looks at the 17 studies that examined cancer effects based on the level of exposure of the subjects, every study found an increased lung cancer risk among those subjects who were most exposed. Nine were statistically significant. The probability of 9 out of 17 studies showing statistically significant results occurring by chance is less than *1 in ten million.*

Probably the most important finding for a causal relationship is one of increasing response with increasing exposure, since such associations cannot usually be explained by other factors. Such exposure-response trends were seen in all 14 studies that examined the relationship between level of exposure and effect. In 10 of the studies the trends were statistically significant. The probability of this happening by chance is less than *1 in a billion.*

It is unprecedented for such a consistency of results to be seen in epidemiology studies of cancer from environmental levels of a pollutant. One reason is that it is extremely difficult to detect an effect when virtually everyone is exposed, as is the case with secondhand smoke. However, consistent increased risks for those most exposed and consistent trends of increasing exposure showing an increasing effect provide strong evidence that secondhand smoke increases the risk of lung cancer in nonsmokers.

30 EPIDEMIOLOGY STUDIES OF ETS AND LUNG CANCER



How Big a Lung Cancer Risk for Adults?

The evidence is clear and consistent: secondhand smoke is a cause of lung cancer in adults who don't smoke. EPA has never claimed that minimal exposure to secondhand smoke poses a huge individual cancer risk. Even though the lung cancer risk from secondhand smoke is relatively small compared to the risk from direct smoking, unlike a smoker who chooses to smoke, the nonsmoker's risk is often involuntary. In addition, exposure to secondhand smoke varies tremendously among exposed individuals. For those who must live or work

in close proximity to one or more smokers, the risk would certainly be greater than for those less exposed.

EPA estimates that secondhand smoke is responsible for about 3,000 lung cancer deaths each year among nonsmokers in the U.S.; of these, the estimate is 800 from exposure to secondhand smoke at home and 2,200 from exposure in work or social situations.

The Risks to Children are Widely Acknowledged

The conclusion that secondhand smoke causes respiratory effects in children is widely shared and virtually undisputed. Even the tobacco industry does not contest these effects in its media and public relations campaign.

EPA estimates that every year, between 150,000 and 300,000 children under 1-1/2 years of age get bronchitis or pneumonia from breathing secondhand tobacco smoke, resulting in thousands of hospitalizations. In children under 18 years of age, secondhand smoke exposure also results in more coughing and wheezing, a small but significant decrease in lung function, and an increase in fluid in the middle ear. Children with asthma have more frequent and more severe asthma attacks because of exposure to secondhand smoke, which is also a risk factor for the onset of asthma in children who did not previously have symptoms.

Other Risks

Secondhand smoke contains strong irritants and sensitizers and many adults, as well as children, suffer irritation and other acute effects whenever they are exposed to secondhand smoke. In addition, there is mounting evidence that exposure to secondhand smoke can have an effect on the cardiovascular system, although the EPA report does not address this issue.

Tobacco Industry Media Campaign

The tobacco industry is raising numerous issues which may distract the public from the fact that secondhand smoke poses a real and preventable health risk. The tobacco industry neither acknowledges nor disputes EPA's conclusions of respiratory effects in children. It focuses instead on EPA's findings on lung cancer.

The overall thrusts of the tobacco industry's arguments are that EPA manipulated the lung cancer data to come to a predetermined conclusion. The industry also argues that a nonsmoker's exposure to secondhand smoke is so small as to be insignificant. The argument on minimal exposure is belied both by the acute irritation and respiratory effects and the fallacy of the "cigarette equivalents" approach discussed below. Responses to the specific criticisms of EPA's assessment of the lung cancer data follow.

The 11 U.S. Lung Cancer Studies

Critics of the EPA report argue that by normal statistical standards, none of the 11 U.S. studies included in the EPA report showed a statistically significant increase in the simple overall risk measure, and that EPA should therefore have been unable to conclude that secondhand smoke causes lung cancer in nonsmokers. These critics are misrepresenting a small part of the total evidence on secondhand smoke and lung cancer.

The consistency of study results in the highest exposure category and exposure-response trends discussed above also apply to the U.S. studies. For example, seven of the 11 U.S. studies had fewer than 45 cases, making statistical comparisons difficult. Nonetheless, eight of the 11 had increased overall risks, and for the seven studies which reported on risks by amount of exposure, the highest exposure groups in all seven had increased risks. While the 11 U.S. studies are not, by themselves, conclusive, they do

support the conclusion that secondhand smoke is causally associated with lung cancer.

Studies Completed Since Release of the EPA Report

Critics claim that had EPA not "excluded" the recent Brownson study, the Agency could not have concluded that secondhand smoke causes cancer. In fact, four new lung cancer epidemiology studies, including the Brownson study, have been published since the literature review cutoff date for the 1993 EPA report, and all support EPA's conclusions. Three of these are large U.S. studies funded, at least in part, by the National Cancer Institute. A 1992 study of Florida women by Stockwell et al. found a 60% overall increased risk of lung cancer from exposure to their husband's smoke, with significant results for both the highest exposure group and the exposure-response trend. The 1992 study of Missouri women by Brownson et al. found no overall increased risk, but did demonstrate a significant increase in risk in the highest spousal smoking exposure group and a positive exposure-response trend.

The 1994 study by Fontham et al. of women in two California and three Southern cities is the largest case-control study on the subject ever conducted and is considered by EPA to be the best designed study on secondhand smoke and lung cancer conducted to date. This study found significantly increased risks for overall exposure and in the highest exposure group and a strong positive exposure-response relationship. These findings were significant not only for exposure from spouses, but also for exposure in the workplace and in social situations.

90% vs 95% Confidence Intervals

Critics of the EPA report have charged that EPA changed the confidence interval in order to come to a predetermined conclusion. However, the conclusion that secondhand smoke is a known human carcinogen simply does not hinge on whether or not a 95% or 90% "confidence interval" was used. A confidence interval is used to display variability in relative risk estimates in the epidemiology studies. As discussed above, the Group A designation is based on the total weight of the available evidence. The consistency of results that are seen in the numerous studies examined lead to a certainty of greater than 99.9% that secondhand smoke increases the risk of lung cancer in nonsmokers.

Use of what is called in statistics a "one-tailed test of significance," which often corresponds to a 90% confidence interval, is a standard and appropriate statistical procedure in certain circumstances. The "one-tailed test" is used when there is prior evidence that if there is an effect from a substance, it is highly likely to be an adverse rather than a protective effect, or vice versa. In the case of secondhand smoke, an extensive database exists for direct smoking indicating that if chemically similar secondhand smoke also has a lung cancer effect, this effect is likely to be similarly adverse. EPA used one-tailed significance tests for lung cancer in both external drafts of the risk assessment document as well as the final report. Ninety percent confidence intervals were also used in other EPA cancer risk assessments, including methylene chloride, coke oven emissions, radon, nickel, and dioxin.

In the non-cancer respiratory effects portions of the report, "two-tailed tests" and 95% confidence intervals were used, since there was less prior evidence from smokers to suggest that secondhand smoke would cause bronchitis, pneumonia, and ear infections in children.

The Meta-analysis

Meta-analysis was used for the lung cancer data as an objective method of combining results from many studies and was specifically endorsed by the SAB for use with this database. Some critics argue both that the meta-analysis was not an appropriate technique, and that had EPA included the Brownson study (addressed above) in the meta-analysis of overall spousal exposure, EPA could not possibly have classified

secondhand smoke as a known human carcinogen. This just isn't true.

The finding that secondhand smoke is a known cause of lung cancer in humans is based on all the evidence and is not dependent on the meta-analysis of the simple ever- vs. never- exposed comparisons, as the critics suggest. If the meta-analysis were removed from the report entirely, the findings would be precisely the same. The meta-analysis was used primarily for estimating and quantifying the population risks from exposure to secondhand smoke, and an alternative approach also used in the report gave very similar results.

Confounders

In the secondhand smoke report, a confounder would be a specific factor that could be responsible for the lung cancer increases observed in nonsmokers instead of secondhand smoke. The tobacco industry and its consultants have suggested, for example, that nonsmoking wives might share in the same poor dietary habits as their smoking husbands, increasing their risk.

The consistency of results across different countries where lifestyle factors, including diet, vary, argues against confounding. For example, while the tobacco industry theorizes that a high fat diet is a confounding factor, the studies from Japan, where dietary fat intake is among the lowest in the world, show a strong dose-response relationship for secondhand smoke and lung cancer.

The EPA report did examine the available data for six potential confounders such as occupation, dietary factors, and history of lung disease, and concluded that none was likely to explain the lung cancer increases seen in the studies.

The 1994 Fontham et al. study controlled for diet and other potential confounders, and concluded, "These observations indicate that the strong association in this study between adult secondhand smoke exposure and lung cancer risk cannot be attributed to any likely confounder."

The "Threshold Theory"

Although some have argued that tobacco smoke cannot cause cancer below a certain level, there is no evidence that this threshold exists. In the absence of such evidence, carcinogens at any level are considered by EPA to increase risk somewhat, although the degree of risk certainly is reduced as exposure decreases. The increased risks observed in the secondhand smoke epidemiology studies are further evidence that any threshold for secondhand smoke would have to be at very low levels.

"Cigarette Equivalents"

The tobacco industry uses the "cigarette equivalent" method of comparing smokers' and nonsmokers' exposures to a single component of tobacco smoke to infer that a nonsmoker's exposure to tobacco smoke is insignificant. However, the cigarette equivalent method has no scientific support, and was rejected by the SAB panel that reviewed the EPA report. Among the many problems with this method is the fact that while secondhand smoke and mainstream smoke contain the same approximately 4,000 compounds, their ratios of individual compounds differ by factors in the thousands. Thus, there is no single compound in tobacco smoke that is an adequate indicator for drawing such comparisons. An RJ Reynolds newspaper ad, while utilizing the method, acknowledges it may not be relevant for assessing risk from secondhand smoke.

Residential Exposures Translated to the Workplace

The tobacco industry frequently argues that because most studies were based on residential exposures, secondhand smoke has not been shown to be a hazard in the workplace. A substance capable of causing cancer in one environment is certainly capable of causing it in any other environment where exposures are comparable, as is the case with

residential and workplace exposure to secondhand smoke. In fact, the 1994 Fontham study found a slightly higher risk for workplace exposure than for residential exposures.

The Congressional Research Service (CRS) Report

The RJ Reynolds' media campaign cites a report prepared by the Congressional Research Service (CRS) on cigarette taxes to fund health care reform to argue that CRS believes that the epidemiological evidence on secondhand smoke and health effects is "weak and uncertain." However, CRS has not taken a position on either EPA's risk assessment or the health effects of passive smoking.

Two economists from CRS, citing material largely prepared by the tobacco industry, included a discussion of EPA's risk assessment in an economic analysis of a cigarette excise tax proposal to fund health care reform. In EPA's view, the CRS economists' cursory look at the issues is not comparable to the exhaustive analyses and rigorous review process which EPA undertook when examining the extensive database on secondhand smoke and respiratory health. EPA is confident that a comprehensive analysis of the secondhand smoke database by expert scientists from CRS, with adequate peer review, will come to conclusions about the risks of secondhand smoke similar to those of EPA and many other organizations.

Cigarette Prohibition

The claim that the government is attempting to bring back prohibition – this time for cigarettes – is a complete fabrication and utter nonsense. EPA's interest is to provide information to protect the nonsmoker from involuntary exposure to a hazardous substance. Having a choice to take a risk for themselves should not permit smokers to impose a risk on others.

Secondhand Smoke Legislation

Congress has recently passed, and President Clinton has signed into law, legislation restricting smoking in nearly all public places where federal assistance is provided for services to children. Children exposed to secondhand smoke almost never have a choice. Protecting children from the health effects of secondhand smoke should be a priority for everyone.

The Clinton Administration supports pending legislation (H.R. 3434, S.1680, S. 262) that would protect nonsmokers, including children, from secondhand smoke in most public places. These bills would not take away the smoker's freedom to choose to smoke, nor would it bring government regulation into the home.

The bills would also make good economic sense. EPA estimates that smoking restrictions would result in saving $4 billion to $8 billion per year in housekeeping and maintenance expenses.

Perhaps most importantly, the bills would prevent thousands of premature deaths of nonsmokers per year and reduce the incidence of respiratory illness in children.

For Further Information

For additional information on secondhand smoke and other indoor air pollutants, call EPA's Indoor Air Quality Information Clearinghouse.

IAQ INFO

Address: IAQ-INFO
P.O. Box 37133
Washington, DC 20013-7133
Phone: 1.800.438.4318
Local: 703.356.4020
Fax: 703.356.5386
E-mail: iaqinfo@aol.com

EPA
United States
Environmental Protection Agency
(6607J)
Washington, DC 20460

United States Environmental Protection Agency | Research and Development (RD-689) | Air and Radiation (6203 J) | EPA-430-F-93-004 January 1993

Respiratory Health Effects of Passive Smoking

Fact Sheet

Summary

The U.S. Environmental Protection Agency (EPA) has published a major assessment of the respiratory health risks of passive smoking (*Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders; EPA/600/6-90/006F*). The report concludes that exposure to environmental tobacco smoke (ETS) -- commonly known as secondhand smoke -- is responsible for approximately 3,000 lung cancer deaths each year in nonsmoking adults and impairs the respiratory health of hundreds of thousands of children.

Background

EPA studies of human exposure to air pollutants indicate that indoor levels of many pollutants often are significantly higher than outdoor levels. These levels of indoor air pollutants are of particular concern because it is estimated that most people spend approximately 90 percent of their time indoors.

In recent years, comparative risk studies performed by EPA and its Science Advisory Board have consistently ranked indoor air pollution among the top five environmental risks to public health. EPA, in close cooperation with other federal agencies and the private sector, has begun a concerted effort to better understand indoor air pollution and to reduce peoples' exposure to air pollutants in offices, homes, schools and other indoor environments where people live, work and play.

Tobacco smoking has long been recognized as a major cause of death and disease, responsible for an estimated 434,000 deaths per year in the United States. Tobacco use is known to cause lung cancer in humans, and is a major risk factor for heart disease.

In recent years, there has been concern that non-smokers may also be at risk for some of these health effects as a result of their exposure ("passive smoking") to the smoke exhaled by smokers and smoke given off by the burning end of cigarettes.

As part of its effort to address all types of indoor air pollution, in 1988, EPA's Indoor Air Division requested that EPA's Office of Research and Development (ORD)

undertake an assessment of the respiratory health effects of passive smoking. The report was prepared by ORD's Office of Health and Environmental Assessment.

The document has been prepared under the authority of Title IV of Superfund (The Radon Gas and Indoor Air Quality Research Act of 1986), which directs EPA to conduct research and disseminate information on all aspects of indoor air quality.

Public and Scientific Reviews

A draft of this assessment was released for public review in June 1990. In December 1990, EPA's Science Advisory Board, a committee of independent scientists, conducted a review of the draft report and submitted its comments to the EPA Administrator in April 1991. In its comments, the SAB's Indoor Air Quality/Total Human Exposure Committee concurred with the primary findings of the report, but made a number of recommendations for strengthening it.

Incorporating these recommendations, the Agency again transmitted a new draft to the SAB in May of 1992 for a second review. Following a July 1992 meeting, the SAB panel endorsed the major conclusions of the report, including its unanimous endorsement of the classification of environmental tobacco smoke (ETS) as a Group A (known human) carcinogen.

EPA also received and reviewed more than 100 comments from the public, and integrated appropriate revisions into the final risk assessment.

Major Conclusions

Based on the weight of the available scientific evidence, EPA has concluded that the widespread exposure to environmental tobacco smoke in the U.S. presents a serious and substantial public health risk.

In adults:

- ETS is a human lung carcinogen, responsible for approximately 3,000 lung cancer deaths annually in U.S. nonsmokers. ETS has been classified as a Group A carcinogen under EPA's carcinogen assessment guidelines. This classification is reserved for those compounds or mixtures which have been shown to cause cancer in humans, based on studies in human populations.

In children:

- ETS exposure increases the risk of lower respiratory tract infections such as bronchitis and pneumonia. EPA estimates that between 150,000 and 300,000 of these cases annually in infants and young children up to 18 months of age are attributable to exposure to ETS. Of these, between 7,500 and 15,000 will result in hospitalization.

- ETS exposure increases the prevalence of fluid in the middle ear, a sign of chronic middle ear disease.

- ETS exposure in children irritates the upper respiratory tract and is associated with a small but significant reduction in lung function.

- ETS exposure increases the frequency of episodes and severity of symptoms in asthmatic children. The report estimates that 200,000 to 1,000,000 asthmatic children have their condition worsened by exposure to environmental tobacco smoke.

- ETS exposure is a risk factor for new cases of asthma in children who have not previously displayed symptoms.

Scope of the Report

In 1986 the National Research Council (NRC) and the U.S Surgeon General independently assessed the health effects of exposure to ETS. Both of these reports concluded that ETS can cause lung cancer in adult non-smokers and that children of parents who smoke have increased frequency of respiratory symptoms and lower respiratory tract infections. The EPA scientific assessment builds on these reports and is based on a thorough review of all of the studies in the available literature

Since 1986 the number of studies which examine these issues in human populations has more than doubled, resulting in a larger database with which to conduct a comprehensive assessment of the potential effects which passive smoking may have on the respiratory health of adults as well as children.

Because only a very small number of studies on the possible association between exposure to secondhand smoke and heart disease and other cancers existed in the scientific literature at the time this assessment was first undertaken, EPA has not conducted an assessment of the possible association of heart disease and passive smoking. EPA is considering whether such an assessment should be undertaken in the future but has no plans to do so at this time.

Scientific Approach

EPA reached its conclusions concerning the potential for ETS to act as a human carcinogen based on an analysis of all of the available data, including more than 30 epidemiologic (human) studies looking specifically at passive smoking as well as information on active or direct smoking. In addition, EPA considered animal data, biological measurements of human uptake of tobacco smoke components and other available data. The conclusions were based on what is commonly known as the total "weight-of-evidence" rather than on any one study or type of study

The finding that ETS should be classified as a Group A carcinogen is based on the conclusive evidence of the dose-related lung carcinogenicity of mainstream smoke in active smokers and the similarities of mainstream and sidestream smoke given off by the burning end of the cigarette. The finding is bolstered by the statistically significant exposure-related increase in lung cancer in nonsmoking spouses of smokers which is found in an analysis of more than 30 epidemiology studies that examined the association between secondhand smoke and lung cancer

The weight-of-evidence analysis for the noncancer respiratory effects in children is based primarily on a review of more than 100 studies including 50 recent epidemiology studies of children whose parents smoke.

Beyond the Risk Assessment

Although EPA does not have any regulatory authority for controlling ETS the Agency expects this report to be of value to other health professionals and policymakers in taking appropriate steps to minimize peoples exposure to tobacco smoke in indoor environments.

In cooperation with other government agencies, EPA will carry out an education and outreach program over the next two years to inform the public and policy makers on what to do to reduce the health risks of ETS as well as other indoor air pollutants.

For Further Information

A limited number of copies of the complete report can be obtained free of charge from:

Center for Environmental Research Information (CERI)
U.S. EPA
26 W. Martin Luther King Drive
Cincinnati, OH 45268
Telephone: 513-569-7562
Fax: 513-569-7566

Ordering Number: EPA/600/6-90/006F

or

U.S. Environmental Protection Agency
Indoor Air Quality Information Clearinghouse (IAQ INFO)
P.O. Box 37133
Washington D.C. 20013-7133
Telephone: 1-800-438-4318
Local (703) 356-4020
Fax: (703) 356-5386

A number of government agencies can provide additional information addressing the health risks of environmental tobacco smoke. These include:

Office on Smoking and Health/Centers for Disease Control
Center for Chronic Disease Prevention and Health Promotion
Mail Stop K-50, 4770 Buford Highway
Atlanta, GA 30341
1-800-CDC-1311

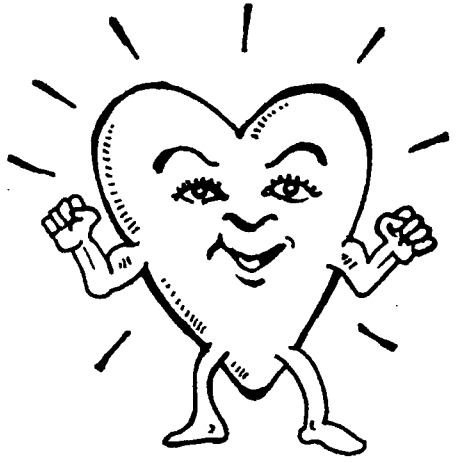
National Cancer Institute
Building 31, Room 10A24
Bethesda, MD 20892
1-800-4-CANCER

The National Heart, Lung, and Blood Institute
Information Center
4733 Bethesda Avenue, Suite 530
Bethesda, MD 20814

National Institute for Occupational Safety and Health
4676 Columbia Parkway
Cincinnati, Ohio 45226-1998
1-800-35-NIOSH

Cut Me Out
Hang on Door, Window or Refrigerator

Thank You For Not Smoking!



"Smoke Free Keeps Me Strong & Healthy"

THANK YOU FOR NOT SMOKING

Every year, 430,000 people die of illnesses related to their smoking. But smokers are not the only ones whose health can suffer. Secondhand smoke can be a hazard to your health and to the health of children. It increases a nonsmoker's risk of lung cancer, heart disease, asthma, allergies, and bronchitis. In children, it can also contribute to middle ear problems and pneumonia.

READ THIS PAMPHLET AND LEARN TO SAY NO TO SECONDHAND SMOKE!

YOU HAVE A RIGHT TO SAY NO!

Thanks to the National Cancer Institute for permission to excerpt from their materials.

Designed by Eva Bernstein.

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THANK YOU FOR NOT SMOKING

How to Say No to Secondhand Smoke

YOU HAVE A RIGHT TO SAY NO!

It's not easy to say no to secondhand smoke. You may feel hesitant or embarrassed to ask someone to stop smoking. But remember, their smoke affects your health and comfort. You have a right to say no!

Saying No to Friends and Family

- ✓ If you live with a smoker, ask him or her to smoke outside. Explain that you are concerned about the health risks.
- ✓ Ask smokers who visit not to smoke in your home.
- ✓ Don't allow smoking in the car either.
- ✓ It's your right to keep your home and car free of this health risk.

Try saying: "Mom (honey, friend's name), I know it's hard when you don't smoke, but I know you care about our health. I'd like to ask you to smoke outside from now on. I don't want to hurt your feelings, but this is really important."

Saying No When You Visit Others' Homes

- ✓ Tell friends and relatives politely that you'd appreciate it if they would not smoke while you're there.
- ✓ Let people know when their smoke is causing immediate problems (making your allergies worse, making you cough, making your eyes sting).
- ✓ Some people will stop smoking when they see the discomfort it causes.

Try saying: "Cigarette smoke is really bad for my allergies (my child's asthma, my husband's heart condition). Would you not smoke right now? I'd really appreciate it."

Saying No at Work

- ✓ Some states and communities have laws that say work places must be smoke free. If this rule is not being enforced, talk with your employer or contact your local health department.
- ✓ If you work where smoking is allowed, ask co-workers not to smoke around you. Thank those who stop.
- ✓ Hang a "Thank You For Not Smoking" sign in your work area.
- ✓ Ask your employer if he or she will make your work place smoke free.

Try saying: "Maybe you didn't know, but this is a nonsmoking work area."

Saying No in Public Places

- ✓ Many public places have rules that prohibit smoking.
- ✓ If smokers don't follow the rules, ask those in charge to enforce them.
- ✓ If you are in a place where smoking is allowed, ask smokers politely to smoke away from you.

Try saying: "I'd like to ask a favor. Would you please move so your smoke is not blowing on me. My doctor says even secondhand smoke is dangerous."

If You Have Children

- ✓ Insist that relatives and caregivers not smoke around your children. Be firm!
- ✓ Let them know that smoke can increase the risk of asthma, bronchitis, pneumonia and middle ear problems in children.
- ✓ Have your children leave the room or play outside if someone is smoking.

Children – take this pamphlet and show your parents or another nonsmoking adult. Ask that person to help you stay smoke free.